

10/500,431

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	216	mass adj marker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/26 10:21
L2	18	L1 and (photo adj activatable or photoactivatable or photolysis)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/26 10:21
S1	787	release adj tag\$1 or charge adj tag\$1 or etag\$1 or electrophoretic adj tag\$1 or cleavable adj tag\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/26 07:28
S2	214	S1 and linker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/25 17:28
S3	96	S2 and (cleavable adj linker or cleavage adj linker or photocleavable)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/25 17:23
S4	216	mass adj marker	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/26 07:29
S5	101	S4 and (cleavage or photo adj cleavage or cleavable or photoactivatable)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/10/26 10:20

10/500,431

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

~~LOGINTO STN~~

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	JUL 20	Powerful new interactive analysis and visualization software, STN AnaVist, now available
NEWS 4	AUG 11	STN AnaVist workshops to be held in North America
NEWS 5	AUG 30	CA/CAPLUS - Increased access to 19th century research documents
NEWS 6	AUG 30	CASREACT - Enhanced with displayable reaction conditions
NEWS 7	SEP 09	ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 8	OCT 03	MATHDI removed from STN
NEWS 9	OCT 04	CA/CAPLUS-Canadian Intellectual Property Office (CIPO) added to core patent offices
NEWS 10	OCT 06	STN AnaVist workshops to be held in North America
NEWS 11	OCT 13	New CAS Information Use Policies Effective October 17, 2005
NEWS 12	OCT 17	STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAPLUS documents for use in third-party analysis and visualization tools
NEWS EXPRESS	JUNE 13	CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS INTER		General Internet Information
NEWS LOGIN		Welcome Banner and News Items
NEWS PHONE		Direct Dial and Telecommunication Network Access to STN
NEWS WWW		CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 08:40:40 ON 26 OCT 2005

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND

command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:40:50 ON 26 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 OCT 2005 HIGHEST RN 866083-87-6
DICTIONARY FILE UPDATES: 25 OCT 2005 HIGHEST RN 866083-87-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

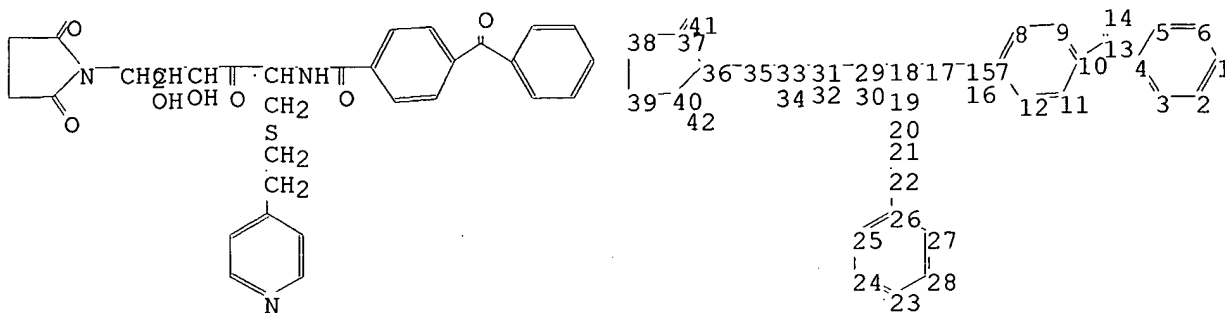
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10500431.str



chain nodes :

13 14 15 16 17 18 19 20 21 22 29 30 31 32 33 34 35 41 42

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 23 24 25 26 27 28 36 37 38 39 40

chain bonds :

4-13 7-15 10-13 13-14 15-16 15-17 17-18 18-19 18-29 19-20 20-21 21-22

22-26 29-30 29-31 31-32 31-33 33-34 33-35 35-36 37-41 40-42

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 23-24 23-28

24-25 25-26 26-27 27-28 36-37 36-40 37-38 38-39 39-40

exact/norm bonds :

13-14 15-16 15-17 17-18 29-30 31-32 33-34 36-37 36-40 37-41 40-42

exact bonds :

4-13 7-15 10-13 18-19 18-29 19-20 20-21 21-22 22-26 29-31 31-33 33-35

35-36 37-38 38-39 39-40

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 23-24 23-28

24-25 25-26 26-27 27-28

isolated ring systems :

containing 1 : 7 : 23 : 36 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom

28:Atom 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS

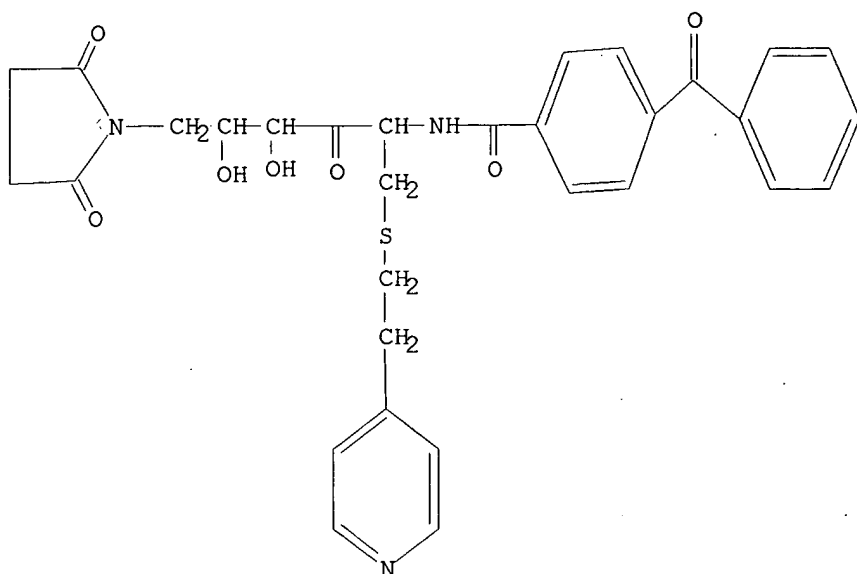
36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:CLASS 42:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 08:41:13 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**

PROJECTED ITERATIONS: 0 TO 0
 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 08:41:20 FILE 'REGISTRY'
 FULL SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 1 ANSWERS
 SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	161.33	161.54

FILE 'CAPLUS' ENTERED AT 08:41:30 ON 26 OCT 2005
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available

for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 26 Oct 2005 VOL 143 ISS 18
FILE LAST UPDATED: 25 Oct 2005 (20051025/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l3

L4 1 L3

=> d l4 ibib abs hitstr tot

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:532861 CAPLUS
DOCUMENT NUMBER: 139:81659
TITLE: Method for molecule-molecule interaction analysis
using a specific linker with mass marker and
photoactivable group
INVENTOR(S): James, Peter
PATENT ASSIGNEE(S): Swed.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003056342	A2	20030710	WO 2002-EP14315	20021216
WO 2003056342	A3	20031106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2465300	AA	20030710	CA 2002-2465300	20021216
EP 1459073	A2	20040922	EP 2002-791831	20021216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005095654	A1	20050505	US 2003-500431	20021216
JP 2005513506	T2	20050512	JP 2003-556814	20021216
PRIORITY APPLN. INFO.:			GB 2001-31014	A 20011228
			WO 2002-EP14315	W 20021216
AB The invention relates to a method for monitoring interactions to a target biomol. comprising the steps of: providing a biomol. of interest having specificity for the target biomol.; binding the biomol. of interest to at least one type of linker mol. comprising a unique mass marker part; introducing the biomol. of interest to a cell; binding the linker to the				

target biomol.; cleaving the linker mol., thereby leaving the photoactivable part and the mass marker part bound to the target; analyzing the target biomol., thereby detecting the unique mass marker part. The detection can be carried out by MS in a parent ion scanning mode, thereby allowing study of the interaction between the biomol. of interest and the target biomol.

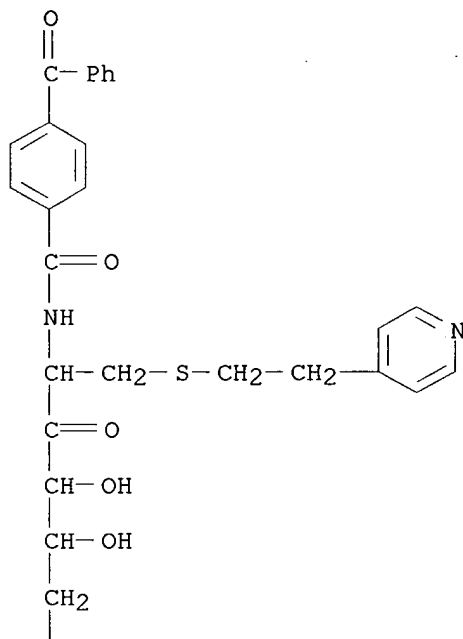
IT 556824-28-3

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (specific linker with mass marker and photoactivable group; method for mol.-mol. interaction anal. using a specific linker with mass marker and photoactivable group)

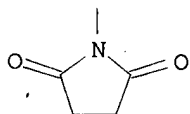
RN 556824-28-3 CAPLUS

CN 3-Hexulose, 2-[(4-benzoylbenzoyl)amino]-2,6-dideoxy-6-(2,5-dioxo-1-pyrrolidinyl)-1-S-[2-(4-pyridinyl)ethyl]-1-thio- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



=> s mass marker

882079 MASS

77704 MASSES

922064 MASS

(MASS OR MASSES)

123033 MARKER

114309 MARKERS

197792 MARKER

(MARKER OR MARKERS)

L5 74 MASS MARKER
 (MASS (W) MARKER)

=> s photoactivatable or photo activable or photo activatable or photolysis

 951 PHOTOACTIVATABLE
 105456 PHOTO
 1206 PHOTOS
 106618 PHOTO
 (PHOTO OR PHOTOS)
 548 ACTIVABLE
 1 ACTIVABLES
 549 ACTIVABLE
 (ACTIVABLE OR ACTIVABLES)
 11 PHOTO ACTIVABLE
 (PHOTO (W) ACTIVABLE)
 105456 PHOTO
 1206 PHOTOS
 106618 PHOTO
 (PHOTO OR PHOTOS)
 2248 ACTIVATABLE
 44 PHOTO ACTIVATABLE
 (PHOTO (W) ACTIVATABLE)
 101071 PHOTOLYSIS
L6 101927 PHOTOACTIVATABLE OR PHOTO ACTIVABLE OR PHOTO ACTIVATABLE OR
 PHOTOLYSIS

=> s 15 and 16

L7 0 L5 AND L6

=> s mass marker or etag or electrophoretic tag or release tag or mass tag or
charge tag

 882079 MASS
 77704 MASSES
 922064 MASS
 (MASS OR MASSES)
 123033 MARKER
 114309 MARKERS
 197792 MARKER
 (MARKER OR MARKERS)
 74 MASS MARKER
 (MASS (W) MARKER)
 25 ETAG
 2 ETAGS
 25 ETAG
 (ETAG OR ETAGS)
 90481 ELECTROPHORETIC
 10 ELECTROPHORETICS
 90483 ELECTROPHORETIC
 (ELECTROPHORETIC OR ELECTROPHORETICS)
 21304 TAG
 8208 TAGS
 25125 TAG
 (TAG OR TAGS)
 17 ELECTROPHORETIC TAG
 (ELECTROPHORETIC (W) TAG)
 451047 RELEASE
 22642 RELEASES
 464522 RELEASE
 (RELEASE OR RELEASES)
 21304 TAG
 8208 TAGS
 25125 TAG
 (TAG OR TAGS)

20 RELEASE TAG
 (RELEASE(W) TAG)
 882079 MASS
 77704 MASSES
 922064 MASS
 (MASS OR MASSES)
 21304 TAG
 8208 TAGS
 25125 TAG
 (TAG OR TAGS)
 102 MASS TAG
 (MASS(W) TAG)
 483469 CHARGE
 62297 CHARGES
 518140 CHARGE
 (CHARGE OR CHARGES)
 21304 TAG
 8208 TAGS
 25125 TAG
 (TAG OR TAGS)
 19 CHARGE TAG
 (CHARGE(W) TAG)
 L8 250 MASS MARKER OR ETAG OR ELECTROPHORETIC TAG OR RELEASE TAG OR
 MASS TAG OR CHARGE TAG

=> s 16 and 18

L9 2 L6 AND L8

=> d 19 ibib abs hitstr tot

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:673040 CAPLUS
 DOCUMENT NUMBER: 143:148701
 TITLE: Mass labels for proteins and nucleic acids and their
 use in analysis of changes in spatial distribution of
 macromolecules
 INVENTOR(S): Levy, Shawn
 PATENT ASSIGNEE(S): Vanderbilt University, USA
 SOURCE: PCT Int. Appl., 67 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005067648	A2	20050728	WO 2005-US516	20050107
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2005196786	A1	20050908	US 2005-31973	20050107
PRIORITY APPLN. INFO.:			US 2004-525075P	P 20040108
			US 2004-535075P	P 20040108
AB	Mass labels that permit simultaneously obtaining information on a number of			

biomols. in a biol. system are described. The labels may be for RNA or protein, and they can be used to obtain information on concns. and spatial disposition within a cell or tissue. The **mass tags** have a core structure, a target binding structure (e.g., nucleic acid or peptide binding structure), a cleavable linker and a **mass tag** that exhibits a unique mass spectroscopy signal. Reconstruction expts. showed that it was possible to detect 400 fmol of a hexatyrosine tag in mouse tissue sections.

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:340519 CAPLUS
 DOCUMENT NUMBER: 141:345779
 TITLE: Clinical proteomics analysis using the highly sensitive **eTag** assay
 AUTHOR(S): Shibasaki, Futoshi; Singh, Sharat
 CORPORATE SOURCE: Tokyo Metropolitan Institute of Medical Science, Japan
 SOURCE: Biobench (2004), 4(2), 43-45
 CODEN: BIOBC8; ISSN: 1346-5376
 PUBLISHER: Yodosha
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: Japanese

AB A review. The **eTag** system using **eTag** binding antibody and the **photo-activable** mol. scissor-antibody conjugate for labeling proteins was described. The mass spectrometric detection of the **eTag** that had been released by the mol. scissor was also described. The use of the **eTags** different masses and recognizing different epitopes and the application to detection of protein phosphorylation were described. The prospect of the application of the method to clin. proteomics anal. was discussed.

=> s l8 and (linker or spacer)
 18330 LINKER
 4318 LINKERS
 20812 LINKER
 (LINKER OR LINKERS)
 41745 SPACER
 14599 SPACERS
 49838 SPACER
 (SPACER OR SPACERS)
 L10 7 L8 AND (LINKER OR SPACER)

=> s l10 and (azide or benzophenone)
 40494 AZIDE
 8450 AZIDES
 42860 AZIDE
 (AZIDE OR AZIDES)
 30962 BENZOPHENONE
 2762 BENZOPHENONES
 31819 BENZOPHENONE
 (BENZOPHENONE OR BENZOPHENONES)
 L11 0 L10 AND (AZIDE OR BENZOPHENONE)

=> s (azide or benzophenone)
 40494 AZIDE
 8450 AZIDES
 42860 AZIDE
 (AZIDE OR AZIDES)
 30962 BENZOPHENONE
 2762 BENZOPHENONES
 31819 BENZOPHENONE
 (BENZOPHENONE OR BENZOPHENONES)
 L12 74432 (AZIDE OR BENZOPHENONE)

=> s l8 and l12
L13 3 L8 AND L12

=> dup rem l10 l13
PROCESSING COMPLETED FOR L10
PROCESSING COMPLETED FOR L13
L14 10 DUP REM L10 L13 (0 DUPLICATES REMOVED)
ANSWERS '1-10' FROM FILE CAPLUS

=> d l14 ibib abs hitstr tot

L14 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:673040 CAPLUS
DOCUMENT NUMBER: 143:148701
TITLE: Mass labels for proteins and nucleic acids and their
use in analysis of changes in spatial distribution of
macromolecules
INVENTOR(S): Levy, Shawn
PATENT ASSIGNEE(S): Vanderbilt University, USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005067648	A2	20050728	WO 2005-US516	20050107
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005196786	A1	20050908	US 2005-31973	20050107
PRIORITY APPLN. INFO.:			US 2004-525075P	P 20040108
			US 2004-535075P	P 20040108

AB Mass labels that permit simultaneously obtaining information on a number of biomols. in a biol. system are described. The labels may be for RNA or protein, and they can be used to obtain information on concns. and spatial disposition within a cell or tissue. The **mass tags** have a core structure, a target binding structure (e.g., nucleic acid or peptide binding structure), a cleavable **linker** and a **mass tag** that exhibits a unique mass spectroscopy signal. Reconstruction expts. showed that it was possible to detect 400 fmol of a hexatyrosine tag in mouse tissue sections.

L14 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:304506 CAPLUS
DOCUMENT NUMBER: 143:3521
TITLE: A new maleimide-bound acid-cleavable solid-support
reagent for profiling phosphorylation
AUTHOR(S): Chowdhury, Saiful M.; Munske, Gerhard R.; Siems,
William F.; Bruce, James E.
CORPORATE SOURCE: Department of Chemistry, Washington State University,
Pullman, WA, 99164-4630, USA

SOURCE: Rapid Communications in Mass Spectrometry (2005),
19(7), 899-909
CODEN: RCMSEF; ISSN: 0951-4198
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new chemical strategy for phosphopeptide profiling is reported in this study. Phosphorylation represents one of the most important classes of posttranslational modifications of proteins. Here we report a generalized strategy that employs solid-phase capture and mass-encoding steps to selectively enrich phosphopeptides from complex mixts. This method exploits conversion of phosphates into thiols and reactive compds. to selectively isolate products of phosphorylation. Selective isolation of phosphopeptides is achieved with a simple, novel, acid-cleavable, solid-support-bound maleimide reagent. Our chemical efforts have focused on minimization of **linker** size and simplification of reagent production with incorporation of common solid-phase peptide synthesis steps. Relative quantitation was demonstrated by modifying phosphopeptides with incorporation of ethanedithiol and propanedithiol. We observed that appropriate normalization is necessary to utilize **mass tag** strategies for relative quantitation of posttranslational modifications. The utility of solid-phase capture was determined with model phosphopeptides, and the method was demonstrated with enriching phosphopeptides from β -casein, α -casein and ovalbumin. The solid-phase capture and release methods were also demonstrated with unfractionated whole histone protein mixts. to show this compound applicability in real biol. samples. The new chemical strategy will ultimately be utilized for high-throughput profiling of phosphorylation and possibly other posttranslational modifications.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:934235 CAPLUS
DOCUMENT NUMBER: 141:389803
TITLE: Genomic signature tag (GST) system for profiling genomic DNA and its use in diagnosis, metagenomics and forensic analysis
INVENTOR(S): Dunn, John J.; Van Der Lelie, Daniel; Krause, Maureen K.; McCorkle, Sean R.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 113,916.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004219580	A1	20041104	US 2004-791074	20040302
US 2003186251	A1	20031002	US 2002-113916	20020401
PRIORITY APPLN. INFO.:			US 2002-113916	A2 20020401

AB Genomic signature tags (GSTs) are the products of a method developed for identifying and quant. analyzing genomic DNAs. The DNA is initially fragmented with a type II restriction enzyme. An oligonucleotide adaptor containing a recognition site for Mmel, a type IIS restriction enzyme, is then used to **release tags** from fixed positions in the DNA relative to the sites recognized by the fragmenting enzyme. These tags are PCR-amplified, purified, concatenated, and then cloned and sequenced. The tag sequences and abundances are used to create a high-resolution GST sequence profile of the genomic DNA. GSTs are shown to be long enough for

use as oligonucleotide primers to amplify adjacent segments of the DNA, which can then be sequenced to provide addnl. nucleotide information or used as probes to identify specific clones in metagenomic libraries. Various embodiments of the invention described herein include methods for using single point genome signature tags to analyze the related families present in a sample, methods for analyzing sequences associated with hyper- and hypo-methylated CpG islands, methods for visualizing organismic complexity change in a sampling location over time and methods for generating the genome signature tag profile of a sample of fragmented DNA.

L14 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:532861 CAPLUS.
DOCUMENT NUMBER: 139:81659
TITLE: Method for molecule-molecule interaction analysis using a specific **linker** with **mass marker** and photoactivable group
INVENTOR(S): James, Peter
PATENT ASSIGNEE(S): Swed.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003056342	A2	20030710	WO 2002-EP14315	20021216
WO 2003056342	A3	20031106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2465300	AA	20030710	CA 2002-2465300	20021216
EP 1459073	A2	20040922	EP 2002-791831	20021216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005095654	A1	20050505	US 2003-500431	20021216
JP 2005513506	T2	20050512	JP 2003-556814	20021216
PRIORITY APPLN. INFO.:			GB 2001-31014	A 20011228
			WO 2002-EP14315	W 20021216

AB The invention relates to a method for monitoring interactions to a target biomol. comprising the steps of: providing a biomol. of interest having specificity for the target biomol.; binding the biomol. of interest to at least one type of **linker** mol. comprising a unique **mass marker** part; introducing the biomol. of interest to a cell; binding the **linker** to the target biomol.; cleaving the **linker** mol., thereby leaving the photoactivable part and the **mass marker** part bound to the target; analyzing the target biomol., thereby detecting the unique **mass marker** part. The detection can be carried out by MS in a parent ion scanning mode, thereby allowing study of the interaction between the biomol. of interest and the target biomol.

L14 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:242601 CAPLUS
DOCUMENT NUMBER: 138:268049

TITLE: Mass labels
 INVENTOR(S): Thompson, Andrew Hugin; Hamon, Christian; Schafer, Jurgen; Kuhn, Karsten; Schwarz, Josef; Neumann, Thomas
 PATENT ASSIGNEE(S): Xzillion G.m.b.H. & Co. K.-G., Germany
 SOURCE: PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003025576	A2	20030327	WO 2002-GB4240	20020916
WO 2003025576	A3	20030731		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2460131	AA	20030327	CA 2002-2460131	20020916
EP 1425586	A2	20040609	EP 2002-767650	20020916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005503557	T2	20050203	JP 2003-529154	20020916
US 2005048489	A1	20050303	US 2004-489341	20041028
PRIORITY APPLN. INFO.:			EP 2001-307830	A 20010914
			WO 2002-GB4240	W 20020916

AB Provided is a set of two or more mass labels, each label in the set comprising a **mass marker** moiety attached via a cleavable **linker** having at least one amide bond to a mass normalization moiety, wherein the aggregate mass of each label in the set may be the same or different and the mass of the **mass marker** moiety of each label in the set may be the same or different, and wherein in any group of labels within the set having a **mass marker** moiety of a common mass each label has an aggregate mass different from all other labels in that group, and wherein in any group of labels within the set having a common aggregate mass each label has a **mass marker** moiety having a mass different from that of all other **mass marker** moieties in that group, such that all of the mass labels in the set are distinguishable from each other by mass spectrometry, and wherein the **mass marker** moiety comprises an amino acid and the mass normalization moiety comprises an amino acid.

L14 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:693335 CAPLUS
 DOCUMENT NUMBER: 135:223774
 TITLE: Mass labels for mass spectrometry
 INVENTOR(S): Schmidt, Gunter; Thompson, Andrew Hugin; Johnstone, Robert Alexander Walker
 PATENT ASSIGNEE(S): Brax Group Limited, UK
 SOURCE: PCT Int. Appl., 102 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068664	A2	20010920	WO 2001-GB1122	20010314
WO 2001068664	A3	20020321		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2403114	AA	20010920	CA 2001-2403114	20010314
AU 2001040834	A5	20010924	AU 2001-40834	20010314
EP 1275004	A2	20030115	EP 2001-911912	20010314
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003529059	T2	20030930	JP 2001-567754	20010314
NO 2002004344	A	20021114	NO 2002-4344	20020912
US 2003194717	A1	20031016	US 2003-221666	20030213
PRIORITY APPLN. INFO.:			GB 2000-6141	A 20000314
			WO 2001-GB1122	W 20010314

OTHER SOURCE(S): MARPAT 135:223774

AB Provided is a set of two or more mass labels, each label in the set comprising a **mass marker** moiety attached via a cleavable **linker** to a mass normalization moiety, the **mass marker** moiety being fragmentation resistant, wherein the aggregate mass of each label in the set may be the same or different and the mass of the **mass marker** moiety of each label in the set may be the same or different, and wherein in any group of labels within the set having a **mass marker** moiety of a common mass each label has an aggregate mass different from all other labels in that group, and wherein in any group of labels within the set having a common aggregate mass each label has a **mass marker** moiety having a mass different from that of all other **mass marker** moieties in that group, such that all of the mass labels in the set are distinguishable from each other by mass spectrometry.

L14 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:284222 CAPLUS

DOCUMENT NUMBER: 134:307611

TITLE: Conjugated polymer tag complexes and their preparation and use in assays

INVENTOR(S): Leif, Robert C.; Franson, Richard C.; Vallarino, Lidia

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027625	A1	20010419	WO 2000-US27787	20001007
W: CA, CH, DE, FI, GB, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2387380	AA	20010419	CA 2000-2387380	20001007
EP 1221052	A1	20020710	EP 2000-968871	20001007

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY

PRIORITY APPLN. INFO.:

US 1999-158718P P 19991008

WO 2000-US27787 W 20001007

AB Processes are described for: (1) the sequential solid phase synthesis of polymers with at least one tag, which can be a light emitting and/or absorbing mol. species (optical-label), a paramagnetic or radioactive label, or a tag that permits the phys. separation of particles including cells. When multiple optical-labels are suitably arranged in three-dimensional space, the energy transfer from one mol. species to another can be maximized and the radiationless loss between members of the same mol. species can be minimized; (2) the coupling of these polymers to biol. active and/or biol. compatible mols. through peripheral pendant substituents having at least one reactive site; and (3) the specific cleavage of the coupled polymer from a solid phase support. The tagged-peptide or polymers produced by these processes and their conjugates with an analyte-binding species, such as a monoclonal antibody or a polynucleotide probe are described. When functionalized europium macrocyclic complexes, as taught in our U.S. patents 5,373,093 and 5,696,240, are bound to polylysine and other peptides, the emitted light increases linearly with the amount of bound macrocyclic complex. Similar linearity will also result for multiple luminescent macrocyclic complexes of other lanthanide ions, such as samarium, terbium, and dysprosium, when they are bound to a polymer or mol.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:303581 CAPLUS

DOCUMENT NUMBER: 133:105250

TITLE: Trityl tags for encoding in combinatorial synthesis

AUTHOR(S): Shchepinov, Mikhail S.; Chalk, Rod; Southern, Edwin M.

CORPORATE SOURCE: Department of Biochemistry, University of Oxford,
Oxford, OX1 3QU, UK

SOURCE: Tetrahedron (2000), 56(17), 2713-2724

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:105250

AB New tags and an encoding strategy for combinatorial synthesis are described. Combinatorial libraries of short oligonucleotides attached to TentaGel beads were synthesized by a split-and-mix strategy using 5'-DMTr or 5'-Fmoc-protected nucleoside phosphoramidites. Trityl moieties with different masses were used to tag the nature and position of monomer units (bases) coupled at each step in the synthesis. Beads with a specific oligonucleotide were selected by hybridization from combinatorial libraries. Tags orthogonal to the added nucleotides were produced by coupling amines of different mol. masses to an activated carboxyl group(s) on the trityl moiety. The tags may be released from the support by an acidic treatment or laser irradiation and then analyzed by (MA)LDI-TOF. These properties make trityl-based tags promising for encoding in strategies not involving strong acids, such as oligonucleotide and peptide synthesis and small mol. combinatorial libraries.

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:425781 CAPLUS

DOCUMENT NUMBER: 131:45049

TITLE: Compounds for mass spectrometry comprising nucleic
acid bases and aryl ether **mass
markers**

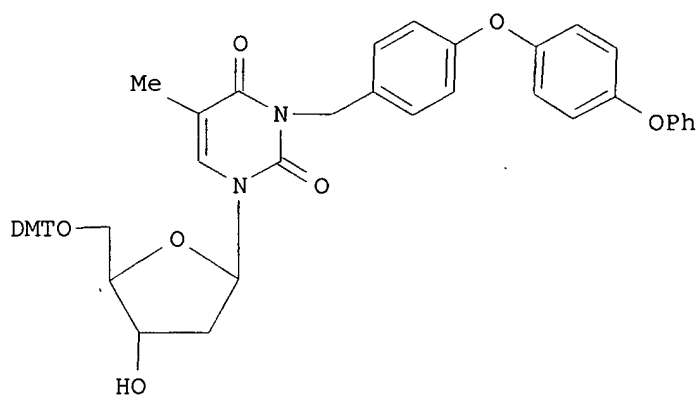
INVENTOR(S): Schmidt, Gunter; Thompson, Andrew Hugin; Johnstone, Robert Alexander Walker
PATENT ASSIGNEE(S): Brax Group Limited, UK
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932501	A1	19990701	WO 1998-GB3842	19981218
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2441655	AA	19980723	CA 1998-2441655	19980115
EP 1400599	A1	20040324	EP 2003-76965	19980115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AU 9917704	A1	19990712	AU 1999-17704	19981218
EP 1042345	A1	20001011	EP 1998-962569	19981218
EP 1042345	B1	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 237626	E	20030515	AT 1998-962569	19981218
PT 1042345	T	20030930	PT 1998-962569	19981218
ES 2196638	T3	20031216	ES 1998-962569	19981218
CA 2337207	AA	20000120	CA 1999-2337207	19990713
CA 2337761	AA	20000120	CA 1999-2337761	19990713
CA 2337762	AA	20000120	CA 1999-2337762	19990713
CA 2385962	AA	20000120	CA 1999-2385962	19990713
CA 2385970	AA	20000120	CA 1999-2385970	19990713
CA 2385987	AA	20000120	CA 1999-2385987	19990713
WO 2000002893	A1	20000120	WO 1999-GB2246	19990713
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2000002894	A1	20000120	WO 1999-GB2247	19990713
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2000002895	A1	20000120	WO 1999-GB2257	19990713
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,				

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
 TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9949203	A1	20000201	AU 1999-49203	19990713
AU 772593	B2	20040429		
AU 9949204	A1	20000201	AU 1999-49204	19990713
AU 772514	B2	20040429		
AU 9949210	A1	20000201	AU 1999-49210	19990713
AU 769966	B2	20040212		
GB 2340237	A1	20000216	GB 1999-16401	19990713
GB 2340237	B2	20031008		
GB 2340122	A1	20000216	GB 1999-16403	19990713
GB 2340602	A1	20000223	GB 1999-16405	19990713
EP 1095051	A1	20010502	EP 1999-933025	19990713
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1095052	A1	20010502	EP 1999-933026	19990713
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1095053	A1	20010502	EP 1999-933033	19990713
EP 1095053	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002520329	T2	20020709	JP 2000-559122	19990713
JP 2002520330	T2	20020709	JP 2000-559123	19990713
JP 2002520580	T2	20020709	JP 2000-559124	19990713
JP 3692299	B2	20050907		
NZ 509517	A	20021126	NZ 1999-509517	19990713
AT 229537	E	20021215	AT 1999-933033	19990713
EP 1275655	A1	20030115	EP 2002-21105	19990713
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
NZ 509516	A	20030131	NZ 1999-509516	19990713
PT 1095053	T	20030430	PT 1999-933033	19990713
ES 2189443	T3	20030701	ES 1999-933033	19990713
NZ 509518	A	20030725	NZ 1999-509518	19990713
US 6287780	B1	20010911	US 2000-581792	20000811
US 6582916	B1	20030624	US 2001-743748	20010316
US 6699668	B1	20040302	US 2001-987679	20011115
JP 2004357697	A2	20041224	JP 2004-36206	20040213
PRIORITY APPLN. INFO.:				
			GB 1997-26953	A 19971219
			GB 1998-15163	A 19980713
			GB 1998-15164	A 19980713
			GB 1998-15166	A 19980713
			GB 1998-23646	A 19981028
			GB 1997-746	A 19970115
			GB 1997-18255	A 19970828
			CA 1998-2277786	A3 19980115
			JP 1998-533942	A3 19980115
			EP 1998-900611	A3 19980723
			WO 1998-GB3842	W 19981218
			EP 1999-933026	A3 19990713
			WO 1999-GB2246	W 19990713
			WO 1999-GB2247	W 19990713
			WO 1999-GB2257	W 19990713
			US 1999-341646	B3 19990920

OTHER SOURCE(S): MARPAT 131:45049
 GI



AB The present invention provides a compound having the following formula:
 N-L-M wherein N comprises one or more nucleic acid bases, L is either a
 direct bond between N and M or L comprises a **linker** moiety, and
 M comprises a **mass marker** comprising an aryl ether.
 Thus, nucleoside benzyl ether I was prepared via coupling of thymidine with
 the corresponding aryl ether bromide and its mass spectra was reported.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1997:527647 CAPLUS
 DOCUMENT NUMBER: 127:187872
 TITLE: Molecular analytical **release tags**
 and their use in chemical analysis
 INVENTOR(S): Giese, Roger W.; Abdel-Baky, Samy; Allam, Kariman
 PATENT ASSIGNEE(S): Northeastern University, USA
 SOURCE: U.S., 38 pp., Cont.-in-part of U.S. Ser. No. 45.089.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5650270	A	19970722	US 1990-496251	19900320
US 4709016	A	19871124	US 1982-344394	19820201
PRIORITY APPLN. INFO.:			US 1982-344394	A1 19820201
			US 1987-45089	B2 19870504

OTHER SOURCE(S): MARPAT 127:187872

AB Anal. reagents designated "**release tags**" are disclosed
 for labeling mol. species with a highly detectable signal group which can
 be released in the form of a volatile compound at a desired point in an
 anal. procedure. In one embodiment, the **release tags**
 have the formula (SgCO)_xL(Rx)_r wherein each Sg is a signal group bearing
 ≥1 electroneg. substituents, L is any of a wide variety of groups
 which, when attached to a carbonyl group, form a readily cleaved linkage,
 each COL moiety is a release group which, upon scission, releases signal
 group Sg in the form of a volatile compound, and each Rx is a reactivity
 group for attaching the **release tag** compound to a mol.
 species to be labeled. In a second embodiment, the **release**
tags have the formula SgReRx wherein Sg and Rx are defined as
 above and Re is a release group which is an olefin, α-hydroxy
 ketone, or vicinal diol. Conjugates of the **release tag**
 compds. with, e.g., proteins, DNA, lipids, carbohydrates, drugs, cells,
 viruses, pesticides, etc. and assay methods employing them are also